

## **REMARKS**

This paper is presented in response to the Office Action. By this paper, claims 1, 9, 14, 18, and 27 are amended, claim 7 is canceled, and new claims 29 and 31 are added. Claims 1-6 and 8-31 are now pending in view of the aforementioned cancellations and new claims.

Reconsideration of the application is respectfully requested in view of the aforementioned amendments to the claims and the following remarks. For the convenience and reference of the Examiner, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

### **I. General Considerations**

Applicant notes that the remarks and amendments, or a lack of remarks, herein are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Further, Applicant reserves the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicant, of additional or alternative distinctions between the claims of the present application and any references cited by the Examiner, and/or the merits of additional or alternative arguments.

### **II. Rejection of Claims 1-5, 8, 9, and 18-20 under 35 U.S.C. § 102**

Applicant respectfully notes that a claim is anticipated under 35 U.S.C. § 102(a), (b), or (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. *MPEP* § 2131.

The Examiner has rejected claims 1-5, 8, 9, and 18-20 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,692,159 to Chiu et al. ("*Chiu*"). The Examiner has also rejected claims 1-3 and 8 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,533,470 to Ahrens ("*Ahrens*"). Applicant respectfully disagrees.

**a. claims 1-5, 8 and 9**

Applicant disagrees that claims 1-5, 8 and 9 are anticipated by *Chiu* and/or *Ahrens*, but Applicant has amended claim 1 to include the limitations of claim 7, indicated to be allowable by the Examiner. In light of the aforementioned amendment to claim 1, Applicant respectfully submits that claim 1, as well as dependent claims 2-5, 8 and 9, are now in allowable condition.

**b. claims 18-20**

By this paper, Applicant has amended claim 18 to recite, among other things "... structure including a plurality of optical transceiver sub-modules that are integrated into a single structure ...". Support for this amendment can be found, for example, at least at Figures 1-4 and paragraph [0034] of the specification. In contrast, the Examiner has not established that *Chiu* or any other reference teaches, or even suggests, this limitation in combination with the other limitations of claim 18.

Inasmuch as the Examiner has not established that the identical invention is shown in *Chiu* in as complete detail as is contained in amended claim 18, and because the Examiner has not shown that *Chiu* discloses the elements of claim 1 arranged as required by that claim, Applicant respectfully submits that the Examiner has not established that *Chiu* anticipates claim 18. For at least the foregoing reasons, Applicant respectfully submits that the rejection of claim 18, as well as the rejection of corresponding dependent claims 19 and 20, should be withdrawn.

**III. Rejection of Claims 6, 10, 21-25 under 35 U.S.C. § 103**

Applicant respectfully notes at the outset that in order to establish a *prima facie* case of obviousness, it is the burden of the Examiner to demonstrate that three criteria are met: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP* § 2143.

The Examiner has rejected claim 10 as being unpatentable over *Chiu*. Further, the Examiner has rejected claims 6 and 21-25 as being unpatentable over *Chiu* as applied to claim 18 and further in view of *Ahrens*. Finally, the Examiner has rejected claims 23-25 as being unpatentable over the combination of *Chiu* and *Ahrens* as applied to claim 18, and further in view of US 6,863,446 to Ngo ("*Ngo*"). Applicant respectfully disagrees.

**a. claims 6 and 10**

Claims 6 and 10 depend from claim 1, believed to be in allowable condition for at least the reasons set forth at II. above. Accordingly, Applicant respectfully submits that the rejection of claims 6 and 10 should be withdrawn.

**b. claims 21-25**

Claims 21-25 depend from claim 18, which, as noted previously, has been amended herein. By virtue of their dependence from independent claim 18, dependent claims 21-25 each require "... structure including a plurality of optical transceiver sub-modules that are integrated into a single structure ..." As discussed at II. above however, the Examiner has not established that this limitation, in combination with the other limitations of the rejected claims, is taught or suggested by *Chiu* or *Ahrens* or any other reference(s). Thus, even if the *Chiu* device is modified by the purported teachings of *Ahrens* and/or *Ngo* in the allegedly obvious fashion advanced by the Examiner, the resulting combinations fail to include all the limitations of the rejected claims.

In light of the foregoing, Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 21-25, at least because the Examiner has not established that the references, when combined, teach or suggest all the limitations of claims 21-25. Applicant thus respectfully submits that the rejection of claims 21-25 should be withdrawn.

**IV. Allowable Subject Matter**

Applicant acknowledges with thanks the indication of the Examiner that claims 11-17 are allowed, and Applicant also wishes to thank the Examiner for the careful review of those claims.

The Examiner has indicated that claims 7 and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In this regard, Applicant has amended claim 1 to include the limitations of claim 7, as noted above, and for at least this reason, claim 1 and its corresponding dependent claims are believed to be in allowable condition. In light of the discussion herein, Applicant respectfully declines to amend claims 26-28 at this time.

Applicant submits the following comments concerning the Examiner's statements of reasons for the indication of allowable subject matter in the Office Action. In general, Applicant agrees with the Examiner that the inventions to which claims 7, 11-17, and 26-28 are respectively directed are patentable over the cited references, but respectfully disagrees with the Examiner's statement of reasons for allowability as set forth in the Office Action.

Particularly, Applicant submits that it is improper to characterize a single limitation, or subset of limitations, as constituting the basis for allowance of a claim. Rather, the patentability of a claim is properly determined with reference to the claim as a whole. Accordingly, Applicant does not concede that the reasons for allowable subject matter given by the Examiner are the only reasons that make, or would make, the claim allowable and Applicant does not make any admission or concession concerning the Examiner's statements in the Office Action concerning the allowability of claims 7, 11-17, and 26-28 in view of the cited references.

**V. New Claims 29-31**

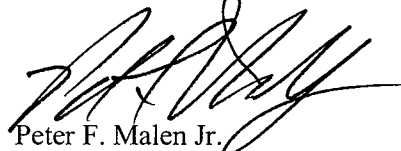
By this paper, Applicant has added new claims 29-31. New claims 29-31 are believed to be in allowable condition for at least the reasons set forth herein.

**CONCLUSION**

In view of the remarks submitted herein, Applicant respectfully submits that each of the pending claims 1-6 and 8-31 is in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 27<sup>th</sup> day of July, 2006.

Respectfully submitted,



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